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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,954	07/01/2002	Masatoshi Kanaya	020287	4537

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EXAMINER
PARSLEY, DAVID J

ART UNIT	PAPER NUMBER
3643	

DATE MAILED: 08/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/069,954	KANAYA ET AL.	
	Examiner	Art Unit	
	David J Parsley	3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5 and 6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5 and 6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 February 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Detailed Action

Amendment

1. This office action is in response to applicant's amendment (paper no. 11) dated 7-2-03 and this action is non-final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,067,328 to Harrison or JP Patent No. 1-202241 to Hayata et al.

Referring to claim 1, Harrison and Hayata et al. disclose a method of detecting and removing unstripped residual shell left on a shellfish, comprising irradiating light at a peak wavelength of 254 nm onto stripped shellfish after finishing a shell-stripping work on the shellfish, and on the basis of information on the intensity of fluorescent light emitted from the shellfish, determining if there is residual shell on the stripped shellfish and subsequently removing any residual shell – see for example columns 1-3 of Harrison and figures 1-14 and pages 1-6 of Hayata et al. where it is inherent that the wavelength is about 254 nm since the

Hayata et al. device uses an x-ray device and x-rays are commonly small in wavelength less than 352 nm.

Referring to claim 5, Harrison and Hayata et al. disclose an apparatus for detecting and removing unstripped residual shell left on shellfish, the apparatus comprising a means – see column 2 of Harrison and – at 32 of Hayata et al. for irradiating light of at a peak wavelength of 254 nm onto stripped shellfish – see column 2 of Harrison and – at 14 of Hayata after finishing the shell-stripping work on the shellfish, detection means – see column 2 of Harrison and – at 36-44 of Hayata for detecting a fluorescent light emitted from the shellfish, a means – see columns 2-3 of Harrison and – at 52-56 of Hayata for determining if there is left a residual shell of the shellfish on the stripped shellfish on the basis of information obtained from the detection means, means – see columns 2-3 of Harrison and – at 59 of Hayata for removing any residual shell on the basis of information from the determining means, – see for example columns 1-3 of Harrison and figures 1-14 and pages 1-6 of Hayata where it is inherent that the wavelength is under 352nm since the Hayata et al. device uses an x-ray device and x-rays are commonly small in wavelength less than 352 nm.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP Patent No. 1-105144 to Hayata et al. in view of Harrison

Referring to claim 1, Hayata et al. discloses a method of detecting and removing unstripped residual shell left on a shellfish, comprising irradiating light of specific wave-range onto stripped shellfish after finishing a shell-stripping work on the shellfish, and on the basis of information on the intensity of fluorescent light emitted from the shellfish, determining if there is residual shell on the stripped shellfish and subsequently removing any residual shell, - see for example figures 1-14 and pages 1-6. Hayata does not disclose the peak wavelength is 254 nm. Harrison does disclose the peak wavelength is 254 nm – see for example column 2. Therefore it would have been obvious to one of ordinary skill in the art to take the method of Hayata and add the peak wavelength of 254 nm of Harrison, so as to allow for more accurate inspection of the shellfish.

Referring to claim 5, Hayata et al. discloses an apparatus for detecting and removing unstripped residual shell left on shellfish, the apparatus comprising a means – 2,4 for irradiating light of specific wave-range onto stripped shellfish after finishing the shell-stripping work on the shellfish, detection means – 8,10 for detecting a fluorescent light emitted from the shellfish, a means – 10,14 for determining if there is left a residual shell of the shellfish on the stripped shellfish on the basis of information obtained from the detection means, means – at 16,18 for removing any residual shell on the basis of information from the determining means – see for example figures 1-14 and pages 1-6. Hayata does not disclose the peak wavelength is 254 nm. Harrison does disclose the peak wavelength is 254 nm – see for example column 2. Therefore it would have been obvious to one of ordinary skill in the art to take the method of Hayata and add

the peak wavelength of 254 nm of Harrison, so as to allow for more accurate inspection of the shellfish.

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayata et al. '241in view of U.S. Patent No. 5,902,177 to Tessier et al.

Referring to claim 2, Hayata et al. discloses a method of detecting and removing a stripped shellfish carrying therewith unstripped residual shell, comprising irradiating a light specific wave-range onto the stripped shellfish after finishing a shell-stripping work on the shellfish, generate a fluorescent light from the stripped shellfish, taking an image of the stripped shellfish, and determining if there is residual shell left on the stripped shellfish on the basis of information to be derived from the image taken up of shellfish on the intensity of the fluorescent light generated from the stripped shellfish, and removing the stripped shellfish if there is any residual shell, wherein the peak wavelength of the irradiated light is less than 400 nm – see for example figures 1-14 and pages 1-6 where it is inherent that the wavelength is 254 nm since the Hayata et al. device uses an x-ray device and x-rays are commonly small in wavelength less than 352 nm.

Hayata et al. does not disclose the image is taken by a CCD camera. Tessier et al. does disclose the image is taken by a CCD camera – see for example columns 10-15. Therefore it would have been obvious to one of ordinary skill in the art to take the method of detecting shellfish with unstripped shell of Hayata et al. and add the image taken by a CCD camera, so as to make the method more effective and accurate in that the light can be accurately read with an image being quickly produced.

Referring to claim 6, Hayata et al. discloses an apparatus for detecting and removing a stripped shellfish carrying therewith unstripped residual shell, the apparatus comprising means -- 32 for irradiating a light of specific wave-range onto the stripped shellfish – 14 after finishing a shell-stripping work on the shellfish, thereby enabling fluorescent light to be generated from the stripped shellfish, an image recording device - at 36 disposed to face the stripped shellfish, means – 52-56 for determining if there is a residual shell left on the stripped shellfish on the basis of information on the intensity of fluorescent light that can be obtained from the image taken by the image recording device, and means - 59 for removing the stripped shellfish if there is any residual shell on the basis of information obtained form the determining means, wherein the peak wavelength of the irradiating light is 254 nm – see for example figures 1-14 and the pages 1-6 where it is inherent that the wavelength is 254 nm since the Hayata et al. device uses an x-ray device and x-rays are commonly small in wavelength.

Hayata et al. further does not disclose the image is taken by a CCD camera. Tessier et al. does disclose the image is taken by a CCD camera – see for example columns 10-15. Therefore it would have been obvious to one of ordinary skill in the art to take the method of detecting shellfish with unstripped shell of Hayata et al. and add the image taken by a CCD camera, so as to make the method more effective and accurate in that the light can be accurately read with an image being quickly produced.

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayata et al. '144 in view of Harrison and Tessier et al.

Referring to claim 2, Hayata et al. discloses a method of detecting and removing unstripped residual shell left on a shellfish, comprising irradiating light of specific wave-range

onto stripped shellfish after finishing a shell-stripping work on the shellfish, and on the basis of information on the intensity of fluorescent light emitted from the shellfish, determining if there is residual shell on the stripped shellfish and subsequently removing any residual shell, - see for example figures 1-14 and pages 1-6.

Hayata does not disclose the peak wavelength is 254 nm. Harrison does disclose the peak wavelength is 254 nm – see for example column 2. Therefore it would have been obvious to one of ordinary skill in the art to take the method of Hayata and add the peak wavelength of 254 nm of Harrison, so as to allow for more accurate inspection of the shellfish.

Hayata et al. further does not disclose the image is taken by a CCD camera. Tessier et al. does disclose the image is taken by a CCD camera – see for example columns 10-15. Therefore it would have been obvious to one of ordinary skill in the art to take the method of detecting shellfish with unstripped shell of Hayata et al. and add the image taken by a CCD camera, so as to make the method more effective and accurate in that the light can be accurately read with an image being quickly produced.

Referring to claim 5, Hayata et al. discloses an apparatus for detecting and removing unstripped residual shell left on shellfish, the apparatus comprising a means – 2,4 for irradiating light of specific wave-range onto stripped shellfish after finishing the shell-stripping work on the shellfish, detection means – 8,10 for detecting a fluorescent light emitted from the shellfish, a means – 10,14 for determining if there is left a residual shell of the shellfish on the stripped shellfish on the basis of information obtained from the detection means, means – at 16,18 for removing any residual shell on the basis of information from the determining means – see for example figures 1-14 and pages 1-6.

Hayata does not disclose the peak wavelength is 254 nm. Harrison does disclose the peak wavelength is 254 nm – see for example column 2. Therefore it would have been obvious to one of ordinary skill in the art to take the method of Hayata and add the peak wavelength of 254 nm of Harrison, so as to allow for more accurate inspection of the shellfish.

Hayata et al. further does not disclose the image is taken by a CCD camera. Tessier et al. does disclose the image is taken by a CCD camera – see for example columns 10-15. Therefore it would have been obvious to one of ordinary skill in the art to take the method of detecting shellfish with unstripped shell of Hayata et al. and add the image taken by a CCD camera, so as to make the method more effective and accurate in that the light can be accurately read with an image being quickly produced.

Response to Arguments

4. Regarding claims 1-2 and 6, the Hayata et al. '241 reference does disclose using a specific wavelength in that a x-ray device operates only at certain wavelengths and it is inherent that a wavelength of 254 nm is in the range of wavelengths used by a x-ray device.

Regarding claims 1 and 5, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teaching, suggestion or motivation to combine

the teachings of the Hayata et al. '241 and the Tessier et al. references is found in the knowledge generally available to one of ordinary skill in the art. The Tessier et al. reference discloses irradiating a piece of meat to locate a hard non-edible substance such as a bone on or in the meat and the Hayata et al. '241 reference discloses irradiating a piece of meat to located a hard non-edible substance such as a shell on the piece of meat and therefore since both the device of Tessier and Hayata performs the same function the references are combinable to make the claims obvious as stated above in paragraph 3 of this office action.

Conclusion

5. Any inquiry concerning this communication from the examiner should be directed to David Parsley whose telephone number is (703) 306-0552. The examiner can normally be reached on Monday-Friday from 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon, can be reached at (703) 308-2574.

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